

## Algebra 3

## Rational Expressions/Factoring Review

Name \_\_\_\_\_

Blk \_\_\_\_\_ Date \_\_\_\_\_

Factor and simplify each of the following completely.

1.  $\frac{a+b}{a^2-b^2}$

2.  $\frac{x^2-1}{x+1}$

3.  $\frac{8x^2-x^3}{16-2x}$

4.  $\frac{2y^2-18}{2y-6}$

5.  $\frac{y^2-9}{y^2+6y+9}$

6.  $\frac{y^2+y-20}{y^2-4}$

7.  $\frac{6y^3-9y^2}{2y^2+5y-12}$

8.  $\frac{x^2-x-20}{x^2+7x+12}$

9.  $\frac{y^2+4y+4}{3y^2+5y-2}$

10.  $\frac{a^2+2a+1}{2a^2+3a+1}$

11.  $\frac{2b^2-9b+9}{b^2-6b+9}$

12.  $\frac{2y^2-y}{2y^3+5y^2-3y}$